```
ATT I THE THE THE THE STATE OF THE STATE OF
```

```
<110> Rodgers, Kathleen
      diZerega, Gere
<120> Methods for Treating and Preventing Alopecia
<130> 00-448-A
<140> To be assigned
<141> Herewith
<160> 50
<170> PatentIn Ver. 2.0
<210> 1
<211> 8
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence:AII
<400> 1
Asp Arg Val Tyr Ile His Pro Phe
<210> 2
<211> 7
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence:AII (2-8)
<400> 2
Arg Val Tyr Ile His Pro Phe
<210> 3
<211> 6
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence:AII (3-8)
<400> 3
Val Tyr Ile His Pro Phe
<210> 4
<211> 7
```

```
<212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence: AII (1-7)
     Asp Arg Val Tyr Ile His Pro
     <210> 5
     <211> 6
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence:AII (2-7)
     <400> 5
     Arg Val Tyr Ile His Pro
       1
     <210> 6
Pυ
     <211> 5
     <212> PRT
     <213> Artificial Sequence
ĹΠ
     <220>
Ţ
     <223> Description of Artificial Sequence:AII (3-7)
     <400> 6
     Val Tyr Ile His Pro
*
     <210> 7
     <211> 4
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence:AII (5-8)
     <400> 7
     Ile His Pro Phe
       1
     <210> 8
     <211> 6
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence:AII (1-6)
```

```
<400> 8
     Asp Arg Val Tyr Ile His
       1
                        5
     <210> 9
     <211> 5
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence:AII (1-5)
     <400> 9
     Asp Arg Val Tyr Ile
       1
     <210> 10
     <211> 4
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence:AII (1-4)
     <400> 10
     Asp Arg Val Tyr
17
       1
     <210> 11
ļuá
     <211> 3
     <212> PRT
     <213> Artificial Sequence
7
     <220>
     <223> Description of Artificial Sequence:AII (1-3)
     <400> 11
     Asp Arg Val
       1
     <210> 12
     <211> 7
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence:AII analogue
     <220>
     <221> MOD RES
     <222> (2)
     <223> Nle
```

```
<400> 12
     Arg Xaa Tyr Ile His Pro Phe
                        5
     <210> 13
     <211> 7
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence: AII analogue
     <220>
     <221> MOD_RES
     <222> (4)
     <223> Nle
     <400> 13
     Arg Val Tyr Xaa His Pro Phe
                        5
     <210> 14
     <211> 3
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence:AII (6-8)
     <400> 14
     His Pro Phe
       1
٦, إ
     <210> 15
     <211> 5
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence:AII (4-8)
     <400> 15
     Tyr Ile His Pro Phe
       1
     <210> 16
     <211> 7
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence: AII analogue
```

. 7

```
class
 <220>
 <221> UNSURE
<222> (1)
 <223> Xaa at position 1 can be Arg, Lys, Ala, Orn, Ser,
      MeGly, D-Arg, or D-Lys
<220>
 <221> UNSURE
<222> (2)
 <223> Xaa at position 2 can be Val, Ala, Leu, Nle, Ile,
      Gly, Pro, Aib, Acp, or Tyr
 <220>
 <221> UNSURE
 <222> (4)
 <223> Xaa at position 4 can be Ile, Ala, Leu, Nle, Val,
       or Gly
<400> 16
Xaa Xaa Tyr Xaa His Pro Phe
 <210> 17
<211> 7
 <212> PRT
 <213> Artificial Sequence
<223> Description of Artificial Sequence:AII analogue
<400> 17
Arg Val Tyr Gly His Pro Phe
 <210> 18
 <211> 7
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> Description of Artificial Sequence: AII analogue
 <400> 18
 Arg Val Tyr Ala His Pro Phe
```

þ≟

<210> 19 <211> 8 <212> PRT

<220>

<213> Artificial Sequence

```
<223> Description of Artificial Sequence:AII analogue 1
<400> 19
Asp Arg Val Tyr Val His Pro Phe
<210> 20
<211> 8
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence:AII analogue 2
<400> 20
Asn Arg Val Tyr Val His Pro Phe
<210> 21
<211> 11
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: AII analogue 3
Ala Pro Gly Asp Arg Ile Tyr Val His Pro Phe
<210> 22
<211> 8
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: AII analogue 4
<400> 22
Glu Arg Val Tyr Ile His Pro Phe
<210> 23
<211> 8
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence:AII analogue 5
<400> 23
Asp Lys Val Tyr Ile His Pro Phe
```

١,٠

ļ

la la

```
<211> 8
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence: AII analogue 6
     <400> 24
     Asp Arg Ala Tyr Ile His Pro Phe
     <210> 25
     <211> 8
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence:AII analogue 7
     Asp Arg Val Thr Ile His Pro Phe
     <210> 26
     <211> 8
     <212> PRT
     <213> Artificial Sequence
ļ. ā
     <220>
     <223> Description of Artificial Sequence: AII analogue 8
     <400> 26
     Asp Arg Val Tyr Leu His Pro Phe
                        5
     <210> 27
     <211> 8
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence: AII analogue 9
     Asp Arg Val Tyr Ile Arg Pro Phe
     <210> 28
     <211> 8
     <212> PRT
```

<210> 24

```
<213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence: AII analogue 10
     <400> 28
     Asp Arg Val Tyr Ile His Ala Phe
     <210> 29
     <211> 8
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence: AII analogue 11
     <400> 29
     Asp Arg Val Tyr Ile His Pro Tyr
     <210> 30
     <211> 8
     <212> PRT
     <213> Artificial Sequence
     <223> Description of Artificial Sequence:AII analogue 12
     <400> 30
     Pro Arg Val Tyr Ile His Pro Phe
fΨ
4.
     <210> 31
     <211> 8
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence: AII analogue 13
   <400> 31
     Asp Arg Pro Tyr Ile His Pro Phe
                       5
     <210> 32
     <211> 8
     <212> PRT
     <213> Artificial Sequence
     <223> Description of Artificial Sequence: AII analogue 14
```

```
<220>
     <221> MOD RES
     <222> (4)
     <223> PHOSPHORYLATION
     <400> 32
     Asp Arg Val Tyr Ile His Pro Phe
     <210> 33
     <211> 8
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence: AII analogue 15
     <220>
     <221> MOD RES
     <222> (3)
     <223> Nle
     <400> 33
     Asp Arg Xaa Tyr Ile His Pro Phe
      1
     <210> 34
     <211> 8
     <212> PRT
     <213> Artificial Sequence
į.
     <220>
     <223> Description of Artificial Sequence: AII analogue 16
٦. ا
     <220>
     <221> MOD_RES
     <222> (5)
     <223> Nle
     <400> 34
     Asp Arg Val Tyr Xaa His Pro Phe
                        5
     <210> 35
     <211> 9
     <212> PRT
     <213> Artificial Sequence
     <223> Description of Artificial Sequence: AII analogue 17
     <220>
     <221> MOD_RES
     <222> (4)
```

63 E

```
<223> homo Ser
     <400> 35
     Asp Arg Val Ser Tyr Ile His Pro Phe
                       5
     <210> 36
     <211> 8
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial
           Sequence:p-aminophenylalanine 6 AII
     <220>
     <221> MOD_RES
     <222> (6)
     <223> p-aminophenylalanine
     <400> 36
     Asp Arg Val Tyr Ile Xaa Pro Phe
١,٢
     <210> 37
     <211> 10
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence:angiotensin I
     <400> 37
     Asp Arg Val Tyr Ile His Pro Phe His Leu
                       5
     <210> 38
     <211> 7
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence:
           1GD:Ala4-AII(1-7)
     <400> 38
     Asp Arg Val Ala Ile His Pro
      1
     <210> 39
     <211> 7
     <212> PRT
     <213> Artificial Sequence
```

1.3

```
<220>
     <223> Description of Artificial Sequence: 2GD
           Pro3-AII(1-7)
     <400> 39
     Asp Arg Pro Tyr Ile His Pro
      1
     <210> 40
     <211> 7
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence: 5GD Lys
           3-AII(1-7)
     <400> 40
     Asp Arg Lys Tyr Ile His Pro
<210> 41
     <211> 7
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence: 9GD
           Norleu-AII(1-7)
     <220>
     <221> MOD_RES
     <222> (3)
     <223> Nle
     <400> 41
     Asp Arg Xaa Tyr Ile His Pro
       1
     <210> 42
     <211> 8
     <212> PRT
     <213> Artificial Sequence
     <220>
     <223> Description of Artificial Sequence GSD28 Ile8-AII
     <400> 42
     Asp Arg Val Tyr Ile His Pro Ile
                       5
```

14 1

```
<211> 8
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence:
      Ala3aminoPhe6-AII
<220>
<221> MOD RES
<222> (6)
<223> aminophenyalanine
<400> 43
Asp Arg Ala Tyr Ile Xaa Pro Phe
<210> 44
<211> 7
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Ala3-AIII
<400> 44
Arg Val Ala Ile His Pro Phe
 1
<210> 45
<211> 8
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence:Gly1-AII
<400> 45
Gly Arg Val Tyr Ile His Pro Phe
<210> 46
<211> 8
<212> PRT
<213> Artificial Sequence
<220>
<221> MOD_RES
<222> (4)
<223> Nle
<223> Description of Artificial Sequence: Norleu4-AIII
```

```
<400> 46
      Arg Val Tyr Xaa Leu His Pro Phe
                        5
      <210> 47
      <211> 8
      <212> PRT
      <213> Artificial Sequence
      <223> Description of Artificial Sequence: Acpc3-AII
      <220>
      <221> MOD RES
      <222> (3)
      <223> 1-aminocyclopentane carboxylic acid
      <400> 47
     Asp Arg Xaa Tyr Ile His Pro Phe
            5
     <210> 48
      <211> 8
      <212> PRT
     <213> Artificial Sequence
      <223> Description of Artificial Sequence: Orn2-AII
     <220>
þá
     <221> MOD_RES
     <222> (2)
     <223> Orn
3.
     <400> 48
     Asp Xaa Val Tyr Ile His Pro Phe
       1
     <210> 49
      <211> 8
     <212> PRT
     <213> Artificial Sequence
      <220>
     <223> Description of Artificial Sequence: Citron2-AII
     <220>
      <221> MOD RES
      <222> (2)
      <223> Citron
      <400> 49
     Asp Xaa Val Tyr Ile His Pro Phe
```

اد کی